

Statement of Work (SOW)
for the
Inspect and Repair Only As Necessary (IROAN)
of the
Mine Clearance Launcher MK 154
NSN 1055-01-226-6338
B1315

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Statement of Work (SOW)
for the Inspect and Repair Only As Necessary (IROAN) of the
Mine Clearance Launcher MK 154
NSN 1055-01-226-6338

1.0 SCOPE. This Statement of Work (SOW) establishes, sets forth tasks and identifies the work efforts that shall be performed by the Contractor in the IROAN effort of the Mine Clearance Launcher MK 154, hereafter referred to as the MK 154. This document contains requirements to restore the MK 154 to Condition Code "A". Condition Code "A" is defined as "serviceable/issuable without qualification, new, used, repaired or reconditioned materiel which is serviceable and issuable to all customers without limitation or restriction, including materiel with more than six months shelf-life remaining". National Stock Number (NSN) 1055-01-226-6338 shall be known as the MK 154.

1.1 Background. IROAN is defined as "that maintenance technique which determines the minimum repairs necessary to restore equipment components or assemblies to prescribed maintenance serviceability standards by utilizing all available diagnostic equipment and test procedures in order to minimize disassembly and parts replacement".

2.0 APPLICABLE DOCUMENTS. The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto which is in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be the superseding requirement.

2.1 Military Specifications

MIL-C-46168	Coating, Aliphatic Polyurethane, Chemical Agent Resistant
MIL-C-53039	Coating, Aliphatic Polyurethane, Single Component, Chemical Agent Resistant

2.2 Military Standards

MIL-STD-129	DoD Standard Practice: Military Marking for Shipment and Storage
MIL-STD-130	Identification Marking of US Military Property
MIL-STD-461	Requirements for the Control of Electromagnetic Interference Emission and Susceptibility

MIL-STD-3003

Vehicles, Wheeled: Preparation for Shipment and Storage of

2.3 Other Government Documents And Publications

DoD 4000.25-1-M	Military Standard Requisitioning and Issue Procedures (MILSTRIP)
DoD 4160.21-M-1	Defense Demilitarization Manual
DoD 4160.21-M	Defense Materiel Disposition Manual
SL-3-09962A	Launcher, Mine Clearance MK 154 Mod 0
TM 09962A-13&P/2	Mark 1 Mod 0 Mine Clearance System
MI-09962A-20/1	Elevation Cylinder Sleeve Stabilization
TI-09962A-35/1	Fabrication and Installation of Electrical Connector Guard for the Launcher, Mine Clearance MK 154
TM 3080-12	Corrosion Prevention and Control for Marine Corps Equipment
TM 3080-50	Corrosion Control Procedures Depot Maintenance Activities for Marine Corps Equipment
TM 4700-15/1H	Ground Equipment Record Procedures
TM 4750-15/1	Painting and Registration Marking for Marine Corps Combat and Tactical Equipment
TM 4750-15/2	Camouflage Paint Patterns
Engineering Drawing 835028A0000 CAGE 01365	Mine Clearance Launcher, MK154, Marine Corps
Engineering Drawing 835028B0000 CAGE 01365	Container Assembly for MK 154 Marine Corps
Reversed Engineering Drawing 835028C0000 CAGE 01365	Mine Clearance Launcher, MK154, Marine Corps

Military Handbooks (For Guidance)

MIL-HDBK-61

Configuration Management Guidance

2.4 Industry Standards

ANSI/ISO/ASQC Q9001-2000

Quality Management Systems – Requirements

Industry Standards (For Guidance)

ANSI/EIA-649

National Consensus Standard for Configuration Management

Copies of Military Standards and Specifications are available from the DoD Single Stock Point, Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, commercial telephone number (215) 697-2179 or DSN 442-2179, or on the Internet at <http://www.dodssp.daps.mil>. Copies of other government documents and publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracting Officer: Contracts Department (Code 891), P. O. Drawer 43019, 814 Radford Blvd., Marine Corps Logistics Command, Albany, Georgia 31704-3019, commercial telephone number (229) 639-6753 or DSN 567-6753. Copies of engineering drawings, if applicable, may be obtained by contacting Supply Chain Management Center, Attn: Code 566-1A, 814 Radford Blvd., STE 20320, Albany, Georgia 31704-0320, commercial telephone number (229) 639-6761 or DSN 567-6761.

3.0 REQUIREMENTS

3.1 General Tasks. In fulfilling the specified requirements, the Contractor shall:

- a. Provide materials, labor, facilities, missing parts, and repair parts necessary to inspect, diagnose, restore, and test the MK 154. Upon completion of IROAN, repaired equipment shall be Condition Code "A".
- b. Provide all tools and test equipment required to test, inspect, repair, and calibrate the MK 154.
- c. Conduct in process and final on-site testing for witness by Marine Corps Systems Command (MCSC), Code PMM152, Albany, Georgia representatives.
- d. Be responsible for all structural, electrical and mechanical requirements associated with the restoration of the MK 154.

3.2 Detail Tasks. The following tasks describe the different phases for IROAN of the MK 154.

3.2.1 Phase I - Pre-Induction. The Contractor shall perform a Pre-Induction Inspection Analysis for each MK 154 using the Contractor's diagnosis, inspection and testing techniques to determine extent of work and parts required. This inspection shall include all items associated with the MK 154 as found in SL-3-09962A, TM 09962A-13&P/2, and TI-09962A-35/1. These findings shall be annotated on a Pre-Induction Check List (Appendix A) and shall be provided to the government in accordance with Paragraph 4.0 of this SOW.

3.2.2 Phase II - IROAN. After Pre-Induction Tests and Inspections have been completed, repair of the MK 154 shall be accomplished by the Contractor in accordance with this SOW. Deficiencies noted on the Pre-Induction Checklist (Appendix A) during Phase I shall be repaired/replaced. The Contractor shall use the List of Defective Parts and Assemblies (Appendix B) to list all defective parts and assemblies. The Contractor shall also use the List of Repair Parts and Assemblies Required for Repairs (Appendix C) to report the parts used on the repaired MK 154. Components or assemblies shall not be disassembled for replacement of mandatory parts unless that part has failed, or the component assembly wherein the part is located is disassembled for repair.

a. Pre-Induction Inspection Checklist - Information recorded on the Pre-Induction Inspection Checklist (Appendix A) shall be used as a guide to repair the MK 154 system in accordance with this SOW.

b. Technical Instruction (TI) - All TI's not previously applied to the MK 154 shall be applied during the IROAN and shall be annotated on Equipment Record Jacket in accordance with TM 4700-15/1H.

c. Corrosion - For corrosion prevention and treatment use TM 3080-12 and TM 3080-50.

d. Fluid Leaks - The following shall be used as a guide in determining degree of fluid loss:

(1) Class I - Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.

(2) Class II - Leakage of fluid great enough to form drops, but not enough to cause drops to fall from the item being checked/inspected.

(3) Class III - Leakage of fluid great enough to form drops that fall from the item being checked/inspected.

NOTE: A Class I leak, except in fuel or brake systems, is an acceptable condition at any time and does not require corrective action.

e. Belts - Replace all.

f. Data Plates - All required data plates and decals shall be in place and shall be legible. Each repaired MK 154 shall have an IROAN data plate affixed to the main unit in close

proximity to the existing data plate. The data plate shall meet the requirements of MIL-STD-130 and TM 4750-15/1 and shall contain the Equipment Serial Number, date of IROAN, date of SOW, SOW number, and company name of Contractor completing work.

g. Painting/Coating (Exterior/Interior) - If painting/coating is required, the MK 154 shall be cleaned in accordance with TM 3080-50, Chapter 4, and coated with Aliphatic Polyurethane Coating, in accordance with MIL-C-46168 or MIL-C-53039 using TM 4750-15/2 as pattern guidance if required.

h. Demilitarization - All end items that are identified as non-repairable and require demilitarization codes shall be reported to the MCSC, Code PMM152, Albany, Georgia representatives, who will provide disposition instructions in accordance with DoD 4160.21-M. and DoD 4160.21-M-1.

i. Electromagnetic Emission - All requirements pertaining to control of electromagnetic interference, emission and susceptibility shall be in accordance with MIL-STD-461.

j. Hardware.

(1) Replace broken, unserviceable and/or missing hardware including nuts, bolts, screws, washers, turnlock fasteners, mandatory, safety and one-time use items, in accordance with TM 09962A-13&P/2. Unserviceable would include any of the above that failed to function properly.

(2) Ensure proper hardware locking devices are present and operational on all moving mechanical assemblies.

(3) Hardware normally supplied with commercial parts shall be used unless specifically prohibited.

k. Hoses - All hoses and fittings shall be visually inspected for damage or deterioration. Any hose showing signs of leakage, kinking or separation of outer coating shall be replaced. This inspection shall be performed during the Operational Test Inspection (OTI) of the MK 154.

l. Cable Assemblies - All cables and cable connections shall be tested and visually inspected for damage or corrosion. Any cable or cable connector showing signs of damage, corrosion or separation of outer coating shall be repaired/replaced and tested with its respective component/assembly to assure satisfactory compliance with all operational tests.

m. Filters - Replace all.

3.2.3 Phase III - Inspection, Testing and Acceptance

a. The Contractor shall conduct Inspection, Testing and Acceptance of the MK 154 in accordance with TM 09962A-13&P/2.

b. The Contractor shall be responsible for conducting required tests and shall ensure representatives from MCSC, Code PMM152, Albany, Georgia and Contractor maintenance personnel are available to complete the final acceptance. Acceptance tests shall be held at the Contractor facility. MCSC, Code PMM152, Albany, Georgia representatives shall be given a minimum of two weeks notice prior to beginning acceptance testing. The test area shall be cleared of all equipment parts, components, not required for the test.

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCSC, Code PMM152, Albany, Georgia representatives may require the Contractor to repeat tests, or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

d. Acceptance Testing/Operational Tests on all MK 154 repaired under the provisions of this SOW shall be accomplished, by the Contractor, in accordance with TM 09962A-13&P/2. Operational Tests are to be conducted on each MK 154 upon completion of repairs and prior to the equipment being returned to stock to insure the unit will perform as required.

3.2.4 Phase IV - Packaging, Handling, Storage and Transportation (PHS&T)

a. The Contractor shall be responsible for preservation and packaging of item(s) being repaired under the terms of this SOW. Items scheduled for long-term storage or shipment to overseas destinations shall be in accordance with Level "A" requirements of MIL-STD-3003. Items scheduled for domestic shipment for immediate use or short-term storage shall be to Level "B" requirement.

b. Marking for shipment and storage shall be in accordance with MIL-STD-129.

c. The Marine Corps will provide the Contractor with the shipping address(es) for delivery of the repaired equipment. The Contractor shall be responsible for arranging for shipment to the pre-designated site(s). The Marine Corps will be responsible for transportation costs associated with shipping the subject equipment to and from the Contractor.

3.3 Configuration Management

3.3.1 Configuration Status Accounting (CSA)

a. The Contractor shall record and submit data on retrofit accomplished during Phase II. Any approved Modifications Instructions (MIs) or Engineering Change Proposals (ECPs) not previously applied shall be incorporated during Phase II of the IROAN process.

b. The Contractor shall determine the application status of approved configuration changes by visual inspections to the extent possible. The government will identify the configuration changes to be inspected by furnishing a Configuration Inspection Checklist to the Contractor. The Contractor shall use one checklist per MK 154 to record the inspection findings along with other required data.

c. The Contractor shall record serial numbers of the assemblies listed on the Configuration Inspection Checklist. The Contractor shall also record the information on the Equipment Record Jacket in accordance with TM 4700-15/1H.

3.3.2 Configuration Control. The Contractor shall apply configuration control procedures to established configuration items. The baseline configuration for the MK 154 has been established by Engineer Drawing numbers 835028A0000, CAGE 01365, for the Mine Clearance Launcher, and 835028B0000, CAGE 01365, for the container and applicable MIs and ECPs. The contractor shall not implement configuration changes to an item's documented performance or design characteristics without prior written authorization. If it is necessary to temporarily depart from the authorized configuration, the contractor shall prepare and submit a Request for Deviation. MIL-HDBK-61 and ANSI/EIA-649 provide guidance for preparing this configuration control document.

3.4 Quality Assurance Provisions. The Contractor shall provide and maintain a Quality System that, as minimum, adheres to the requirements of ANSI/ISO/ASQC Q9001-2000 Quality Management Systems - Requirements.

3.5 Acceptance. The performance of the Contractor and the quality of work delivered, including all equipment furnished and documentation written or compiled, shall be subject to in-process review and inspection during performance. Inspection may be accomplished in-plant or at any work site or location, and MCSC, Code PMM152, Albany, Georgia representatives shall be permitted to observe the work or to conduct inspection during normal Contractor's working hours. Final Inspection and Acceptance Testing shall be conducted at the Contractor Facility. Final acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements.

3.6 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by MCSC, PMM152, Albany, Georgia. The Contractor shall, at no additional cost to MCSC, PMM152, Albany, Georgia, provide the following:

a. Develop an approach for modification or correction of all deficiencies.

b. Upon approval of a documented approach, the Contractor shall correct the deficiencies and repeat the verification until an acceptable compliance with acceptance test procedures is demonstrated.

3.7 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM). The Management Control Activity (MCA) (Code 581-1B) will coordinate GFE/GFM requests and maintain a central control system on all government owned assets in the Contractor's possession. The MCA will forward a GFE Accountability Agreement to the Contractor for signature on an annual basis to establish a chain of custody and identify property responsibilities for Marine Corps assets. The Contractor is to acknowledge receipt of GFM to the MCA within 15 days of receipt. This can be done by mailing a copy of the DD 1348 to Materiel and Distribution Management Department, Distribution Management Branch, Management Control Activity

(Code 581-1B), 814 Radford Blvd, STE 20320, Albany, Georgia 31704-0320, or faxing a copy to commercial telephone number (229) 639-5498 or DSN 567-5498. If Depot Source of Repair (DSOR) mandated, assets at repair facility will not be considered GFE/GFM.

3.8 Contractor Furnished Materiel (CFM). The Contractor may requisition materiel as required in the performance of the SOW through the DoD Supply System. DoD 4000.25-1-M (MILSTRIP), Chapter 11, provides guidance to Contractors on the requisitioning process. The Contractor's decision to utilize CFM procured from the DoD Supply System shall be based upon cost effectiveness, availability of materiel and the required completion/delivery date.

3.9 Pre-Induction Checklist. The Contractor shall complete the Pre-Induction Inspection Checklist (Appendix A), List of Defective Parts and Assemblies (Appendix B), and List of Repair Parts and Assemblies Required for Repairs (Appendix C), for each MK 154 repaired. These documents shall be available during final acceptance testing. One copy of each document shall be provided to Commanding General, Marine Corps Systems Command, Code PMM152, 814 Radford Blvd., STE 20343, Albany, Georgia 31704-0343, 30 days after final acceptance of each MK 154 in PDF Format Media.

The inspection checklist shall contain, but not be limited to the following:

- (1) MK 154 serial number. Appendix A, B, and C.
- (2) Condition Code of MK 154 at receipt. Appendix A.
- (3) Results of operational test. Appendix A.
- (4) List of defective parts and assemblies. Appendix B.
- (5) List of repair parts and assemblies required for repairs. Appendix C.
- (6) Corrosion prevention methods that shall be used will be documented on the first page of Appendix A.

Pre-Induction Inspection
Checklist
APPENDIX A

MK154 Serial number: _____ Condition Code at receipt: _____
Results of operational test: _____

Corrosion prevention methods that shall be used.

Inspect all components for operating/malfunction/defective parts per TM 09962A-13&P/2.
Visually check components for leaks, damage, loose parts & hardware. No disassembly of
components is allowed unless the component is determined to be defective.

Checklist

APPENDIX A

COMPONENT	PASS	FAIL	REMARKS:
Mast Assy	_____	_____	_____
External-Actuator Cover	_____	_____	_____
Actuator Arm Lever	_____	_____	_____
Housing to Actuator Assy	_____	_____	_____
Hose Assy, Starboard	_____	_____	_____
Starboard Actuator Manifold	_____	_____	_____
Starboard Actuator Assy	_____	_____	_____
Housing-Actuator Hydraulic	_____	_____	_____
Hose Assy, Port	_____	_____	_____
Housing - Actuator Hydraulic	_____	_____	_____
System, Port	_____	_____	_____
Port Actuator Manifold	_____	_____	_____
Port Actuator Assy	_____	_____	_____
Starboard/Port Hinge Arm	_____	_____	_____
Starboard Door Assy	_____	_____	_____
Door Seals	_____	_____	_____
Door Latch Rod, Starboard Door	_____	_____	_____
Port Door Assy	_____	_____	_____
Wiring Harness W16	_____	_____	_____
Platform, Equipped for Access	_____	_____	_____
Launcher Cylinder Hydraulic Hose Assy	_____	_____	_____
Launch Cylinder Hose Assys	_____	_____	_____
Launcher Cylinder	_____	_____	_____
Launcher Cylinder Swivel Joint	_____	_____	_____
Elevation Cylinder Hose Assys	_____	_____	_____
Elevation Cylinder Swivel Joint & Elbows	_____	_____	_____
Elevation Cylinder Assy	_____	_____	_____
Elevation Cylinder Manifold	_____	_____	_____
Elevation Cylinder	_____	_____	_____
Turnbuckle Connecting Rod	_____	_____	_____
Elevation Cylinder Linkage Adjustment	_____	_____	_____
Connecting Rod	_____	_____	_____
Pivot Pin	_____	_____	_____
Pivot Bearings	_____	_____	_____
Center Sheath	_____	_____	_____
Shield	_____	_____	_____
Launcher Platform Rail	_____	_____	_____
Travel Lock Assy	_____	_____	_____
Pivot Assy	_____	_____	_____
Bumper	_____	_____	_____
Stop	_____	_____	_____
Bracket, Connecting Rod	_____	_____	_____
Mercury Switch Box	_____	_____	_____
Pendulum Box Assy	_____	_____	_____
Rockets Power Distribution Box	_____	_____	_____
Rocker Arm	_____	_____	_____
Support Arm	_____	_____	_____
Arm Sheath	_____	_____	_____

Checklist APPENDIX A

COMPONENT	PASS	FAIL	REMARKS:
Port/Starboard Intermediate Sheath	_____	_____	_____
Sequence Lock Manifold	_____	_____	_____
Sequence Lock Manifold Hydraulic Assys	_____	_____	_____
Support Arm Tube Assys	_____	_____	_____
Elbow	_____	_____	_____
Elbow Bracket	_____	_____	_____
Three-Hole Bulkhead	_____	_____	_____
Tube Angle Mounting	_____	_____	_____
Launcher Housing Tube Assy	_____	_____	_____
Junction Box A	_____	_____	_____
Junction Box B	_____	_____	_____
Limit Switch	_____	_____	_____
Limit Switch Arm Bracket	_____	_____	_____
Wiring Harness W15	_____	_____	_____
Latch Pivot Bracket	_____	_____	_____
Latch Spring	_____	_____	_____
Test Plugs	_____	_____	_____
Nipple	_____	_____	_____
Coupler	_____	_____	_____
Lower Seal	_____	_____	_____
Sheath	_____	_____	_____
Intermediate Housing Sheath	_____	_____	_____
Port Housing Guard	_____	_____	_____
Starboard Housing Guard	_____	_____	_____
Forward Port Housing Guard	_____	_____	_____
Aft Port Housing Guard	_____	_____	_____
Forward Starboard Housing Guard	_____	_____	_____
Aft Starboard Housing Guard	_____	_____	_____
Port/Starboard Bar	_____	_____	_____
Swivel Elbow (Port H2)	_____	_____	_____
Tie-Down and Adapter Assy	_____	_____	_____
Tie-Down Adapter	_____	_____	_____
Tie-Down Assy	_____	_____	_____
Aft Wall Guard	_____	_____	_____
Aft Guard Assy	_____	_____	_____
Aft Port Guard	_____	_____	_____
Aft Starboard Guard	_____	_____	_____
Forward Guard Assy	_____	_____	_____
Cable Guide	_____	_____	_____
Starboard Cable Guide	_____	_____	_____
Aft Port Cable Guide	_____	_____	_____
Lower Engine Access Cover Latch	_____	_____	_____
Upper Engine Access Cover Striker	_____	_____	_____
Rail	_____	_____	_____
Center Channel Assy	_____	_____	_____
Aft Pallet Rail Tie-Down Bracket	_____	_____	_____
Port/Starboard Ramp	_____	_____	_____
Rear Pallet Assy	_____	_____	_____

Checklist APPENDIX A

COMPONENT	PASS	FAIL	REMARKS:
Wear Plate	_____	_____	_____
Quick Release Pins	_____	_____	_____
Starboard Ramp Crossmember	_____	_____	_____
Ramp Wear Plates	_____	_____	_____
Aft Pallet	_____	_____	_____
Forward Pallet Assy	_____	_____	_____
Housing to Forward Pallet Hose Assys	_____	_____	_____
Capstan Hydraulic Hose Assy	_____	_____	_____
Forward Pallet Rail Tie-Down Bracket	_____	_____	_____
Quick Disconnect Coupler Fitting	_____	_____	_____
Power Distribution Box Assy	_____	_____	_____
Quick Disconnect Nipple Fitting	_____	_____	_____
200A Circuit Breaker	_____	_____	_____
2A Circuit Breaker	_____	_____	_____
10A Circuit Breaker	_____	_____	_____
200A Relay	_____	_____	_____
10A Relay	_____	_____	_____
Terminal Block	_____	_____	_____
Indicator Light Assy	_____	_____	_____
Toggle Switch	_____	_____	_____
Slave Plug	_____	_____	_____
Capstan with Hydraulic Motor Assy	_____	_____	_____
Capstan Drum	_____	_____	_____
Reduction Gearbox	_____	_____	_____
Reduction Gearbox Lubricating Oils	_____	_____	_____
Reduction Gearbox Oil Change	_____	_____	_____
Hydraulic Filter Change	_____	_____	_____
Capstan Hydraulic Motor	_____	_____	_____
Hydraulic Power Unit	_____	_____	_____
Manual Hydraulic Pump	_____	_____	_____
Manual Hydraulic Pump Handle	_____	_____	_____
Electric Motor/Hydraulic Pump	_____	_____	_____
Electric Motor/Hydraulic Pump	_____	_____	_____
Control Manifold	_____	_____	_____
Reservoir Assy	_____	_____	_____
Sight Glass	_____	_____	_____
Relief Valve	_____	_____	_____
Pressure Gauge	_____	_____	_____
Manual Pump Outlet Tube	_____	_____	_____
Manual Pump Inlet Tube	_____	_____	_____
Clip Spring	_____	_____	_____
Hydraulic Pump Inlet Tube	_____	_____	_____
Hydraulic Pump Outlet Tube	_____	_____	_____
Wiring Harness W12	_____	_____	_____
Wiring Harness W13	_____	_____	_____
Wiring Harness W14	_____	_____	_____
Arm Switch	_____	_____	_____
Control Box	_____	_____	_____

Checklist
APPENDIX A

COMPONENT	PASS	FAIL	REMARKS:
Control Box & Mounting	_____	_____	_____
Brackets Assy	_____	_____	_____
Brackets	_____	_____	_____
Lamps	_____	_____	_____
Selector Knob	_____	_____	_____
Toggle Switch Guard	_____	_____	_____
Receptacles	_____	_____	_____
Receptacle Connections	_____	_____	_____
10A Relay	_____	_____	_____
Relay Connections	_____	_____	_____
Filters	_____	_____	_____
Filter Connections	_____	_____	_____
System Power Switch	_____	_____	_____
System Power Switch Connections	_____	_____	_____
Panel Light	_____	_____	_____
Panel Light Connections	_____	_____	_____
Push Switches	_____	_____	_____
Push Switch Connections	_____	_____	_____
Rotary Switch	_____	_____	_____
Rotary Switch Connections	_____	_____	_____
Launch Angle Indicator	_____	_____	_____
Circuit Board Assy	_____	_____	_____
Circuit Board Assembly Connections	_____	_____	_____
Indicator Light	_____	_____	_____
Indicator Light Connections	_____	_____	_____
Raise/Lower Switch	_____	_____	_____
Raise/Lower Switch Connections	_____	_____	_____
Electric Wire	_____	_____	_____
Wire Connections	_____	_____	_____
Container, Top	_____	_____	_____
Container , Bottom	_____	_____	_____
Gasket, Container Joint	_____	_____	_____

THIS BELOW SPACE IS FOR COMMENTS AND OBSERVATIONS AFTER THE INSPECTION HAS BEEN COMPLETED. Please annotate and initial.

LIST OF DEFECTIVE PARTS
AND ASSEMBLIES

APPENDIX B

COMPONENT

REMARKS:

Mast Assy
External-Actuator Cover
Actuator Arm Lever
Housing to Actuator Assy
Hose Assy, Starboard
Starboard Actuator Manifold
Starboard Actuator Assy
Housing-Actuator Hydraulic Hse Assy, Port
Housing - Actuator Hydraulic System, Port
Port Actuator Manifold
Port Actuator Assy
Starboard/Port Hinge Arm
Starboard Door Assy
Door Seals
Door Latch Rod, Starboard Door
Port Door Assy
Wiring Harness W16
Platform, Equipped for Access
Launcher Cylinder Hydraulic Hose Assy
Launch Cylinder Hose Assys
Launcher Cylinder
Launcher Cylinder Swivel Joint
Elevation Cylinder Hose Assys
Elevation Cylinder Swivel Joint & Elbows
Elevation Cylinder Assy
Elevation Cylinder Manifold
Elevation Cylinder
Turnbuckle Connecting Rod
Elevation Cylinder Linkage Adjustment
Connecting Rod
Pivot Pin
Pivot Bearings
Center Sheath
Shield
Launcher Platform Rail
Travel Lock Assy
Pivot Assy
Bumper
Stop
Bracket, Connecting Rod
Mercury Switch Box
Pendulum Box Assy
Rockets Power Distribution Box
Rocker Arm
Support Arm
Arm Sheath Port/Starboard
Intermediate Sheath

APPENDIX B

LIST OF DEFECTIVE PARTS
AND ASSEMBLIES

APPENDIX B

COMPONENT

REMARKS:

Sequence Lock Manifold
Sequence Lock Manifold Hydraulic Assy
Support Arm Tube Assys
Elbow
Elbow Bracket
Three-Hole Bulkhead Tube
Angle Mounting
Launcher Housing
Tube Assys
Junction Box A
Junction Box B
Limit Switch
Limit Switch Arm Bracket
Wiring Harness W15
Latch Pivot Bracket
Latch Spring
Test Plugs
Nipple
Coupler
Lower Seal
Sheath
Intermediate Housing Sheath
Port Housing Guard Starboard Housing
Guard
Forward Port Housing Guard
Aft Port Housing Guard
Forward Starboard Housing Guard
Aft Starboard Housing Guard
Port/Starboard Bar
Swivel Elbow (Port H2)
Tie-Down and Adapter Assy
Tie-Down Adapter
Tie-Down Assy Aft Wall
Guard Aft Guard Assy Aft Port Guard Aft
Starboard Guard Forward Guard Assy Cable
Guide Starboard Cable Guide Aft Port Cable
Guide Lower Engine Access Cover Latch
Upper Engine Acc Cover Strike Rail
Center Channel Assy
Aft Pallet Rail Tie-Down Bracket
Port/Starboard Ramp
Rear Pallet Assy
Wear Plate
Quick Release Pins
Starboard Ramp Crossmember
Ramp Wear Plates
Aft Pallet

APPENDIX B

LIST OF DEFECTIVE PARTS AND ASSEMBLIES

APPENDIX B

REMARKS:

COMPONENT	REMARKS:
Forward Pallet Assy	
Housing to Forward Pallet Hose Assys	
Capstan Hydraulic Hose Assys	
Forward Pallet Rail Tie-Down Bracket	
Quick Disconnect Coupler Fitting	
Power Distribution Box Assy	
Quick Disconnect Nipple Fitting 200A	
Circuit Breaker	
2A Circuit Breaker	
10A Circuit Breaker	
200A Relay	
10A Relay	
Terminal Block Indicator Light Assy	
Toggle Switch Slave Plug Capstan with	
Hydraulic Motor Assy Capstan Drum	
Reduction Gearbox	
Reduction Gearbox Lubricating Oils	
Reduction Gearbox Oil Change	
Hydraulic Filter Change	
Capstan Hydraulic Motor	
Hydraulic Power Unit	
Manual Hydraulic Pump	
Manual Hydraulic Pump Handle	
Electric Motor/Hydraulic Pump	
Electric Motor/Hydraulic Pump	
Control Manifold	
Reservoir Assy	
Sight Glass	
Relief Valve	
Pressure Gauge	
Manual Pump Outlet Tube	
Manual Pump Inlet Tube	
Clip Spring	
Hydraulic Pump Inlet Tube	
Hydraulic Pump Outlet Tube	
Wiring Harness W12	
Wiring Harness W13	
Wiring Harness W14	
Arm Switch	
Control Box	
Control Bx & Mounting Brackets Assy	
Brackets	
Lamps	
Selector Knob	
Toggle Switch Guard	
Receptacles	
Receptacle Connections	

APPENDIX B

25 August 2004

LIST OF DEFECTIVE PARTS AND ASSEMBLIES

APPENDIX B

REMARKS:

COMPONENT

10A Relay

Relay Connections

Filters

Filter Connections

System Power Switch

System Power Switch Connections

Panel Light

Panel Light Connections

Push Switches

Push Switch Connections

Rotary Switch

Rotary Switch Connections

Launch Angle Indicator

Circuit Board Assy

Circuit Board Assy Connections

Indicator Light

Indicator Light Connections

Raise/Lower Switch

Raise/Lower Switch Connections

Electric Wire

Wire Connections

Container, Top

Container , Bottom

Gasket, Container Joint

ADDITIONAL OBSERVATIONS:

MK154 Serial number:_____

ADDITIONAL COMMENTS AND OBSERVATIONS: Please annotate and initial.

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LIST OF REPAIR PARTS AND
ASSEMBLIES REQUIRED FOR
REPAIRS
APPENDIX C

25 August 2004

COMPONENT

REMARKS:

Mast Assy
External-Actuator Cover
Actuator Arm Lever
Housing to Actuator Assy Hose
Assy, Strbrd Starboard Starboard
Actuator Manifold
Starboard Actuator Assy
Housing-Actuator Hydraulic Hse
Assy, Port
Housing – Actuator Hydraulic
System, Port
Port Actuator Manifold
Port Actuator Assy
Starboard/Port Hinge Arm
Starboard Door Assy
Door Seals
Door Latch Rod, Starboard Door
Port Door Assy
Wiring Harness W16
Platform, Equipped for Access
Launcher Cylinder Hydraulic Hose
Assy
Launch Cylinder Hose Assys
Launcher Cylinder
Launcher Cylinder Swivel Joint
Elevation Cylinder Hose Assys
Elevation Cylinder Swivel Joint &
Elbows
Elevation Cylinder Assy
Elevation Cylinder Manifold
Elevation Cylinder
Turnbuckle Connecting Rod
Elevation Cylinder Linkage
Adjustment
Connecting Rod
Pivot Pin
Pivot Bearings
Center Sheath
Shield
Launcher Platform Rail
Travel Lock Assy
Pivot Assy
Bumper
Stop
Bracket, Connecting Rod
Mercury Switch Box Pendulum Box
Assy
Rockets Power Distribution Box

REPAIRS
APPENDIX C

COMPONENT

REMARKS:

Rocker Arm Support Arm Arm
Sheath Port/Starboard Intermediate
Sheath
Sequence Lock Manifold
Sequence Lck Manifold Hydraul Assy
Support Arm Tube Assys
Elbow
Elbow Bracket Three-Hole Bulkhead
Tube Angle Mounting
Launcher Housing Tube Assys
Junction Box A
Junction Box B
Limit Switch
Limit Switch Arm Bracket Wiring
Harness W15
Latch Pivot Bracket
Latch Spring
Test Plugs
Nipple
Coupler
Lower Seal
Sheath
Intermediate Housing Sheath
Port Housing Guard Starboard
Housing Guard
Forward Port Housing Guard
Aft Port Housing Guard
Forward Starboard Housing Guard
Aft Starboard Housing Guard
Port/Starboard Bar
Swivel Elbow (Port H2)
Tie-Down and Adapter Assy
Tie-Down Adapter
Tie-Down Assy Aft Wall Guard Aft
Guard Assy Aft Port Guard Aft
Starboard Guard Forward Guard Assy
Cable Guide Starboard Cable Guide
Aft Port Cable Guide Lower Engine
Access Cover Latch Upper Eng
Access Cover Striker Rail
Center Channel Assy
Aft Pallet Rail Tie-Down Bracket
Port/Starboard Ramp
Rear Pallet Assy
Wear Plate
Quick Release Pins
Starboard Ramp Crossmember
Ramp Wear Plates

REPAIRS
APPENDIX C

COMPONENT

REMARKS:

Aft Pallet
Forward Pallet Assy
Housing to Forward Pallet Hose Assy
Capstan Hydraulic Hose Assys
Forward Pallet Rail Tie-Down
Bracket
Quick Disconnect Coupler Fitting
Power Distribution Box Assy
Quick Disconnect Nipple Fitting
200A Circuit Breaker
2A Circuit Breaker
10A Circuit Breaker
200A Relay
10A Relay
Terminal Block Indicator Light Assy
Toggle Switch Slave Plug Capstan
with Hydraulic Motor Assy Capstan
Drum Reduction Gearbox
Reduction Gearbox Lubricating Oils
Reduction Gearbox Oil Change
Hydraulic Filter Change
Capstan Hydraulic Motor
Hydraulic Power Unit
Manual Hydraulic Pump
Manual Hydraulic Pump Handle
Electric Motor/Hydraulic Pump
Electric Motor/Hydraulic Pump
Control Manifold
Reservoir Assy
Sight Glass
Relief Valve
Pressure Gauge
Manual Pump Outlet Tube
Manual Pump Inlet Tube
Clip Spring
Hydraulic Pump Inlet Tube
Hydraulic Pump Outlet Tube
Wiring Harness W12
Wiring Harness W13
Wiring Harness W14
Arm Switch
Control Box
Contrl Bx & Mounting Brackets Assy
Brackets
Lamps
Selector Knob
Toggle Switch Guard
Receptacles

LIST OF REPAIR PARTS AND
ASSEMBLIES REQUIRED FOR
REPAIRS
APPENDIX C

25 August 2004

COMPONENT

Receptacle Connections

10A Relay

Relay Connections

Filters

Filter Connections

System Power Switch

System Power Switch Connections

Panel Light

Panel Light Connections

Push Switches

Push Switch Connections

Rotary Switch

Rotary Switch Connections

Launch Angle Indicator

Circuit Board Assy

Circuit Board Assy Connections

Indicator Light

Indicator Light Connections

Raise/Lower Switch

Raise/Lower Switch Connections

Electric Wire

Wire Connections

Container, Top

Container , Bottom

Gasket, Container Joint

REMARKS:

ADDITIONAL NOTES:

(1 Data Item)

Form Approved

OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY: TDP _____ TM _____ OTHER _____	
D. SYSTEM/ITEM Mine Clearance Launcher, MK154		E. CONTRACT/PR NO.		F. CONTRACTOR	
1. DATA ITEM NO. A001		2. TITLE OF DATA ITEM Request For Deviation (RFD)		3. SUBTITLE Configuration Management	
4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-80640C		5. CONTRACT REFERENCE SOW Para 3.3		6. REQUIRING OFFICE Marine Corps Logistics Command, Albany (MCLCA) (Code 566)	
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED A		10. FREQUENCY SEE BLK 16	
8. APP CODE N/A		11. AS OF DATE N/A		12. DATE OF FIRST SUBMISSION SEE BLK 16	
13. DATE OF SUBSEQUENT SUBMISSION N/A		14. DISTRIBUTION		a. ADDRESSEE	
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17. PRICE GROUP

18. ESTIMATED TOTAL PRICE	
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